

Amendments to the Claims

This listing of claims will replace all prior listings of claims in the application.

Listing of Claims

1.-4. (Canceled)

5. (Previously Presented) An electroless copper plating method according to Claim 6, wherein the first reducing agent is glyoxylic acid, the second reducing agent is hypophosphorous acid and the stabilizer to inhibit copper deposition is 2,2'-bipyridyl.

6. (Currently Amended) An electroless copper plating method comprising the steps of:

preparing a pretreatment agent by reacting or mixing a noble metal compound and a silane coupling agent having a functional group with metal-capturing capability;

pretreating a mirror surface consisting of a silicon wafer on which a tantalum nitride film is formed having a surface roughness of less than 10 nm with the pretreatment agent prior to electroless copper plating;

performing electroless copper plating on the pretreated mirror surface with an electroless copper plating solution comprising a first reducing agent, hypophosphorous acid or a hypophosphite as a second reducing agent and a stabilizer for inhibiting copper deposition; and

forming a thin film having a thickness of no more than 500 nm on the pretreated mirror surface by the electroless copper plating.